

Switch OFF the Spectrometer  
 File: H\_FCP\_SPI\_SDEF.xls  
 Author: R. Biggins



## Procedure Summary

### Objectives

The objective of this procedure is to switch OFF the Spectrometer Detectors (SDET)

### Summary of Constraints

n/a

### Spacecraft Configuration

#### Start of Procedure

SPIRE is in SPECSTBY mode

#### End of Procedure

SPIRE is in REDY mode

### Reference File(s)

#### Input Command Sequences

#### Output Command Sequences

HFSSDEF

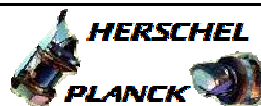
### Referenced Displays

ANDs	GRDs	SLDs
SA_6_559		
SAF0_559		
SA_4_559		
SA_7_559		
SA_5_559		

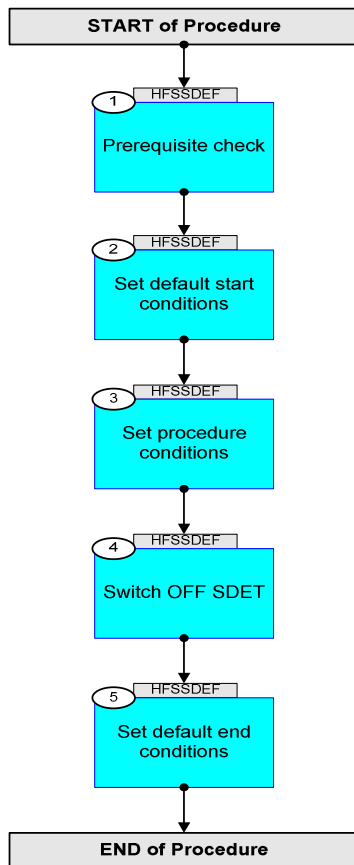
### Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
07/08/2007		1	Created	R. Biggins	
15/01/2008		2	Update due to initial testing against the simulator: 2 - TCs updated due to new DB	R. Biggins	

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## Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
<b>Beginning of Procedure</b>				
HFSSDEF Switch OFF SDET				
SSID :				
1		Prerequisite check		Next Step: 2
		Verify Telemetry MODE SM00M500	= SPECSTBY	AND=SA_6_559
2		Set default start conditions		Next Step: 3
	ET=+00.00.00 UT=+00.00.00	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE ---- -- SSID : 370	SC003500  0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE ---- -- SSID : 370	SC001500  80010001 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE ---- -- SSID : 370	SC003500  1 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_OBSID Command Parameter(s) : OBSERVATION_ID SP00N500 TC Control Flags : GBM IL DSE ---- -- SSID : 370	SC000500  B0000000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP                      SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500  0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID                      SP01N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC001500  80000000 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP                      SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500  0 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID                      SP01N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC001500  80020001 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP                      SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500  1 <hex>	
3		Set procedure conditions		Next Step: 4

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	RESET_DRCU_COUNTERS  RESET_DRCU_COUNTERS  TC Control Flags :  SSID : 370  GBM IL DSE --- -- ---	SCD00505	
	ET=+00.00.01 UT=+00.00.01	SET_OBSID  SET_OBSID  Command Parameter(s) : OBSERVATION_ID SP00N500  TC Control Flags :  SSID : 370  GBM IL DSE --- -- ---	SC000500  OBS_ID	
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP  SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  TC Control Flags :  SSID : 370  GBM IL DSE --- -- ---	SC003500  0 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_BBID  SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID SP01N500  TC Control Flags :  SSID : 370  GBM IL DSE --- -- ---	SC001500  80000000 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP  SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  TC Control Flags :  SSID : 370  GBM IL DSE --- -- ---	SC003500  0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID  SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID SP01N500  TC Control Flags :  SSID : 370  GBM IL DSE --- -- ---	SC001500  86030001 <hex>	

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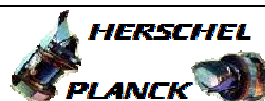
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.02 UT=+00.00.02	SET_OBS_MODE  SET_OBS_MODE  Command Parameter(s) : OBSERVING_MODE                      SPD02N500  TC Control Flags :  GBM IL DSE --- -- ---  SSID : 370	SC002500  2fd <hex>	
		Verify Telemetry  MODE                      SM00M500	= SDET_OFF	AND=SA_6_559
4		Switch OFF SDET		Next Step: 5
	ET=+00.00.00 UT=+00.00.00	Send DRCU command  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                      SPD4N505 OVERRIDE                      SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  SSID : 370	SCD06505  84340000 <hex> 0 <hex> (Def)	
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetPhaseShift for Spectro SW  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                      SPD4N505 OVERRIDE                      SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  SSID : 370	SCD06505  843A0000 <hex> 0 <hex> (Def)	
		Verify Telemetry  SSWPHASE                      SM00R510	= 0.00 deg	AND=SAF0_559
	ET=+00.00.00 UT=+00.00.00	Send DRCU command to SetPhaseShift for Spectro LW  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                      SPD4N505 OVERRIDE                      SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  SSID : 370	SCD06505  843B0000 <hex> 0 <hex> (Def)	
		Verify Telemetry  SLWPHASE                      SM10R510	= 0.0 deg	AND=SAF0_559

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetSpectroBiasAmpl for Spectro SW SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505  TC Control Flags : GBM IL DSE --- -- ---  SSID : 370	SCD06505  84310000 <hex> 0 <hex> (Def)	
		Verify Telemetry SSWBIAS SMB4V510	= 0.0 mV	AND=SAF0_559
	ET=+00.00.00 UT=+00.00.00	Send DRCU command to SetSpectroBiasAmpl for Spectro LW SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505  TC Control Flags : GBM IL DSE --- -- ---  SSID : 370	SCD06505  84320000 <hex> 0 <hex> (Def)	
		Verify Telemetry SLWBIAS SMB5V510	= 0.00 mV	AND=SAF0_559
	ET=+00.00.01 UT=+00.00.01	Send DRCU command to SetDRelOnOff SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505  TC Control Flags : GBM IL DSE --- -- ---  SSID : 370	SCD06505  A0870004 <hex> 0 <hex> (Def)	
		Verify Telemetry SCUDCDCSTAT SM_2F520	= 0004 <hex>	AND=SA_4_559
	ET=+00.00.01 UT=+00.00.01	SET_OBS_MODE SET_OBS_MODE  Command Parameter(s) : OBSERVING_MODE SP02N500  TC Control Flags : GBM IL DSE --- -- ---  SSID : 370	SC002500  200 <hex>	
		Verify Telemetry MODE SM00M500	= REDY	AND=SA_6_559

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP                      SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500 0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID                      SP01N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC001500 80000000 <hex>	
	ET=+00.00.02 UT=+00.00.02	CLEAR_HK_REPORT CLEAR_HK_REPORT Command Parameter(s) : PCKTID_CLEARHK                      SPR6N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SCR01500 301 <hex>	
	ET=+00.00.00 UT=+00.00.00	DEFINE_NEW_HK_REPORT DEFINE_NEW_HK_REPORT Command Parameter(s) : HKPCKTID_DEFINENEWHK                      SPR0N500 HKSID_DEFINENEWHK                      SPR1N500 HKINTERVAL_DEFINENEWHK                      SPR2N500 HKREPEAT_DEFINENEWHK                      SPR3N500 TABLEID_DEFINENEWHK                      SPR4N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SCR00500 301 <hex> 301 <hex> fa0 <hex> 1 <hex> 1 <hex>	
		Verify Telemetry SLIABITSTAT                      SM_1X520	= OFF	AND=SA_7_559
		Verify Telemetry SPECJFETSTAT                      SMF0F510	= 0 <hex>	AND=SA_5_559
		Verify Telemetry SSWJFET1V                      SM00V510	= 0.0 V	AND=SA_5_559
		Verify Telemetry SSWJFET2V                      SM01V510	= 0.0 V	AND=SA_5_559
		Verify Telemetry SLWJFET1V                      SM10V510	= 0.0 V	AND=SA_5_559

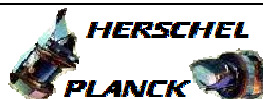


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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry SLIAP5V SML3V510	= 0.0 V	AND=SA_5_559
		Verify Telemetry SLIAP9V SML4V510	= 0.0 V	AND=SA_5_559
		Verify Telemetry SLIAM9V SML5V510	= 0.0 V	AND=SA_5_559
5		Set default end conditions		Next Step: END
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500  0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID SP01N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC001500  80030001 <hex>	
	ET=+00.00.02 UT=+00.00.02	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP SP03N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC003500  1 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_OBSID SET_OBSID Command Parameter(s) : OBSERVATION_ID SP00N500 TC Control Flags : GBM IL DSE --- -- --- SSID : 370	SC000500  B0000000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP SET_OBS_STEP Command Parameter(s) : OBSERVATION_STEP      SP03N500 TC Control Flags : GBM IL DSE --- -- -- SSID : 370	SC003500  0 <hex>	
	ET=+00.00.00 UT=+00.00.00	SET_BBID SET_BBID Command Parameter(s) : BUILDING_BLOCK_ID      SP01N500 TC Control Flags : GBM IL DSE --- -- -- SSID : 370	SC001500  80000000 <hex>	
End of Procedure				